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WORKING GROUP
OF —

DISPOSAL OF AWKWARD HOUSEHOLD WASTES

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Disposal of Awkward Household Wastes

*Report of the Working Group on the
Disposal of Awkward Household Wastes*

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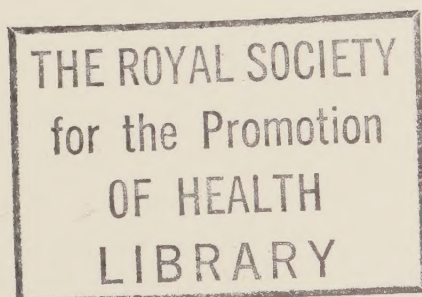
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Chapter 1 Introductory

1. Arising from the concern expressed in Parliament and elsewhere about dangers and possible pollution from disposal of awkward household wastes—particularly used sump oil from motorists doing their own oil changes—we were asked by the Department of the Environment to consider what advice local authorities could give householders to promote acceptable methods of disposal. At the same time we were to examine the working of section 18 of the Civic Amenities Act 1967, at that time 5 years old, which requires local authorities to provide sites for the disposal of refuse, other than business refuse, by residents and others. Our terms of reference were:

‘To identify wastes other than normal household refuse which, because of their capacity to pollute, their poisonous or otherwise dangerous nature, or because of their bulk or difficulty in handling, create problems for householders in disposal. These will include used sump oil, poisons or pesticides surplus to householders’ needs, and aerosols. It is expected that the Group will examine the suitability of existing arrangements and facilities for the collection and disposal of these wastes and possible alternative methods, and will also consider the working of section 18 of the Civic Amenities Act 1967 as regards the disposal of refuse. The object will be to formulate advice which local authorities should be recommended to make available to householders and ways in which such advice could be given publicity.’

2. Membership of the Group consisted of representatives of local authority associations, professional bodies and Government departments. We first met in September 1972 and have held 10 meetings. Initially we identified the particular wastes which needed to be looked at. These fell into distinct categories—medical and nursing wastes, medicines and poisons, pesticides, and sump oil—and are dealt with in separate chapters of this report. A ‘miscellaneous’ chapter covers those wastes which do not fall readily into a particular category. Our examination of the operation of section 18 of the Civic Amenities Act is the subject of a separate chapter and covers also the special collection service.

3. We agreed that it would be helpful to supplement our own experience by inviting representatives of other bodies who could contribute specialist knowledge, to attend meetings and discuss with the Group the problems arising and how these could be handled.

4. We have considered what particular problems of disposal each waste presents and depending on quantity and type, the extent to which existing systems (main drainage and refuse collection) can be utilised. Where appropriate, alternative solutions are recommended. We have also considered in relation to some of the

wastes whether there is a case for a special collection. The contribution Government, local authorities and other organisations can make to achieve satisfactory solutions is discussed.

5. We would like to acknowledge the help we have received from representatives of the industries and others who have attended the meetings or who have provided information for our use.

Chapter 2 Medical and Nursing Wastes (other than Medicines)

6. The wider use of disposables in medical and nursing practice has increased the quantity of such wastes arising in the home. Further, although there has been a downward trend in home confinements the increasing number of older people being nursed at home has tended overall to generate additional wastes.

7. Whilst not exhaustive, the principal kinds of wastes which come under this general heading are:

- a. surgical dressings and similarly soiled materials;
- b. disposables used in domestic medical practice, for example plastics syringes, tongue depressors;
- c. litter following home confinements;
- d. wastes resulting from the nursing of elderly and incontinent patients;
- e. miscellaneous wastes – paper handkerchiefs, sanitary towels, babies' disposable nappies, disposable colostomy bags, etc.

A traditional and convenient way of dealing with some of these wastes was to burn them on the open domestic fire or the solid fuel boiler. But the replacement of these forms of heating by other methods has removed this solution. Moreover, burning in the home is not suitable for the modern disposables made of plastics.

8. We are advised that some local health authorities issue plastics bags, which can be sealed, for containing soiled dressings, incontinence pads and similar wastes and that special arrangements often exist for collecting these for disposal either in hospital incinerators or in the normal local authority refuse disposal facility. Alternatively wastes in sealed bags or otherwise suitably wrapped are placed in the domestic dustbin or other refuse storage receptacle for collection and disposal in the normal way.

9. In a reference to these types of wastes arising in the home, the Working Party on Refuse Disposal in paragraph 483 of their report¹ suggested that these should be packaged in opaque plastics or other suitable disposable bags. Subject to the further precautions referred to in the next paragraph we agree with this advice and recommend that the wastes should then be disposed of through any special collection arranged by the local authority for this type of waste or, in the absence of such arrangements, by placing in the dustbin or other storage receptacle for collection in the normal way.

10. Some further precautions should be taken for the following items before being packaged:

¹ Refuse Disposal—H.M.S.O. 1971.

a. Plastics syringes and needles

In 1972 11 million syringes and 16 million needles were issued to general practitioners; in addition considerable numbers were issued to district nurses. They are disposable, each syringe and needle being used once and then discarded; thus sterility of the equipment can be guaranteed. After use, syringes should be rendered unserviceable by replacing the needle-cap and snapping the syringe across the needle mount. The pieces should then be wrapped together with the discarded glass ampoule;

b. Colostomy bags

The contents should be emptied down the WC before the bags are wrapped for collection and disposal.

Chapter 3 Medicines and Poisons

11. The safe disposal of unwanted medicines and poisons is essential. Cases of accidents in the home particularly to children are all too frequent. Safe custody and ways of averting accidents are however the responsibility of other bodies; we are concerned to draw up advice on the methods of disposal so that medicines and poisons for which households no longer have a use are not retained as a source of danger but are disposed of properly, speedily and safely.

12. Records show that the number of prescriptions issued under the National Health Service in 1971 and 1972 amounted to some 240 million and 256 million at an annual cost of £187 million and £211 million. Proprietary medicines bought over the counter in 1971, the latest year for which figures are available, cost a further £107·7 million. The potential therefore for hoarding is considerable and that this is done on a large scale is confirmed by evidence given to us by the Pharmaceutical Society of Great Britain and others. Figures quoted to us as examples of hoarding show that as a result of a week's campaign in three different parts of the country 25 cwt, 13 cwt and 4 cwt of medicines and tablets were handed in.

13. The Pharmaceutical Society of Great Britain have urged doctors to prescribe smaller quantities; but we accept that this alone would not eliminate the problem even were the existing stocks of hoarded medicines to be safely disposed of immediately, particularly as there is evidence that proprietary medicines are retained even longer than prescribed medicines. Labelling medicines with a disposal date has been suggested as a possible incentive to disposal but there are difficulties about this and in any case it would require the consideration of the Medicines Commission. We are satisfied that advice is needed now to encourage safe disposal.

Methods of disposal

14. We have noted the view given in paragraph 258 of the report on the Disposal of Solid Toxic Wastes (the 'Key report')¹ that pills and drugs surplus to a household's needs can be disposed of by flushing down the WC. The report says that many drugs are non-toxic and those that are toxic will be diluted to infinitesimal concentrations in the sewage effluent of the district. The report distinguishes between small amounts which could be disposed of by this method and larger quantities which create problems.

¹ H.M.S.O. 1970.

15. Other methods of disposal include return to agreed collection points, depositing in the dustbin, burning or burying. Of these all but the first are unacceptable for the following reasons:

a. Disposal by placing in the dustbin

This method does not present a safe means of disposal as it provides opportunities for medicines to get into the wrong hands, particularly children's. This could occur at almost any stage of the normal storage and collection procedure. This method ought never to be used;

b. Disposal by burning

Opportunities for burning in homes are limited but nevertheless this can never be done without some risk to persons involved, especially if toxic gases are likely to be generated;

c. Other methods

Burying in the garden, disposal in litter baskets, etc. These methods do not satisfy the essential requirement of safe custody at all stages.

16. We are satisfied that the only two methods which can be recommended are disposal to sewers via the WC or by return to agreed collection points.

a. Disposal via the WC

We consider this to be the most satisfactory method of day-to-day disposal. It enables medicines and lotions, antiseptics and similar possibly poisonous preparations in liquid, capsule or solid form to be disposed of immediately and thus eliminates the hazards created when medicines are hoarded in the home. The Association of River Authorities and the Institute of Water Pollution Control whom we have consulted, agree that in small quantities disposal by this means is unlikely to be harmful in sewage disposal systems and evidence we have supports the view of the 'Key report' that medicines are not generally toxic. Once the contents have been disposed of by this method the bottle or container should be placed in the dustbin for normal collection;

b. Disposal by return to local authority or other collection point

Subject to suitable arrangements for safe collection, custody and ultimate disposal, this is an acceptable solution. Collection points could include pharmacists or health centres, and we suggest that local authorities should explore possibilities along these lines.

17. The main objective must be to instil into members of the public the habit of disposing of medicines in these ways immediately they have served their purpose, and the maximum publicity should be directed to promoting such day-to-day disposal. It cannot be overstressed that whatever the method of disposal, care should be taken at all times to ensure that medicines and poisons are kept out of the reach of children.

Collection campaigns

18. We know that substantial quantities of medicines are hoarded which need to be cleared before the habit of day-to-day disposal can be really effective.

To do this we consider that collection campaigns should be organised. These campaigns will help both to focus attention on the extent of the problem and to provide a starting point for the more long term process of education. They could also be used from time to time to monitor the extent to which the methods we have recommended are being followed.

19. The Pharmaceutical Society of Great Britain have said that they are willing to play their part in organising collection campaigns. The Society have already taken the initiative by encouraging pharmacists to promote such schemes in their areas in conjunction with local health authorities and other local associations. The Royal Society for the Prevention of Accidents (RoSPA) might be asked to help with any publicity.

20. The detailed organisation of collection campaigns will depend on local circumstances. Whatever the arrangements the first essential is complete security during storage, collection and final disposal.

21. As already stated campaigns have produced substantial quantities of medicines and poisons. We are told that it is not practicable for these to be re-used, not least because of doubt as to age and composition. Likely methods of final disposal would be under controlled conditions at a municipal incinerator or at a controlled tip but this is a matter which should be discussed with the local authority.

22. We recommend local authorities to discuss with the Pharmaceutical Society of Great Britain, RoSPA and interested local bodies the organising of collection campaigns as soon as possible.

Chapter 4 Pesticides

23. In the context of this report a pesticide is defined as a preparation containing any substance (active ingredient) used to destroy or repel any insect, mite, mollusc, nematode, fungus, bacterium, virus, rodent or other pest capable of destroying, fouling or otherwise causing a nuisance in the home or outdoors in the home garden. The advice given in this chapter also includes weedkillers used in the home garden.

24. Pesticides play an important part in combating pests and disease. They are extensively used commercially and because of the training given to operatives and controls mainly exercised by the Ministry of Agriculture, Fisheries and Food, the United Kingdom's safety record is second to none. In the domestic sphere pesticides are used to protect the home from insects, mite and rodent pests which can cause sickness, attack or contaminate food, or be an unwanted nuisance. In a domestic garden they enable the home gardener to follow practices essential to the commercial grower. There seems little likelihood at present that economically practical alternatives will replace the use of pesticides. There are no reliable figures on the quantities of pesticides available for home and garden use but in 1972 a figure of 26 million was given for the consumption in that year of hand pressure pack insecticidal aerosols of which a large proportion are used on the domestic market.

Controls

25. We understand that commercial users of the more toxic chemicals are subject to stringent controls. In particular the Agriculture (Poisonous Substances) Regulations provide protection for users in the commercial, agricultural and horticultural fields. Products for home and garden consumption invariably consist of the less toxic chemicals not scheduled by these regulations.

26. The Pesticides Safety Precautions Scheme (PSPS) enables the Government to exercise very close supervision over the introduction to the market of new pesticides. It is a flexible scheme agreed between the associations representing the pesticide manufacturers and the Government agricultural and health departments, covering the use of pesticides in agriculture, forestry, horticulture, home gardens and food storage (including home kitchens and larders). Under the scheme a manufacturer or retailer wishing to introduce a new product in this field must notify it. These notifications are considered by specialist committees which are the responsibility of the Ministry of Agriculture, Fisheries and Food and other appropriate Government departments. If the product and its uses are

considered acceptable a recommendations sheet is published. These sheets which are widely circulated may contain advice on use and disposal. Appendix B lists amateur garden chemicals which have been cleared by the Ministry of Agriculture, Fisheries and Food.

27. In addition to the pesticides which come within the scope of the PSPS there are a few used in medical and veterinary products and these are subject to statutory control under the Medicines Act.

28. A further group of pesticides does not come within either the PSPS or the Medicines Act and this is the subject of a special study recently undertaken by the Department of the Environment. In comparison with those used in agriculture and food storage this group includes only small quantities of pesticides and those which are the concern of the home user are the insecticides used in aerosol sprays to control flying insects (outside the home garden, kitchen or larder), moth-proofers or moth killers and wood preservatives. (Pesticides to control those insects which attack or are liable to contaminate agricultural products or food stuffs come within the control of PSPS). The results of this special study will be considered by the Advisory Committee on Pesticides and Other Toxic Chemicals later in 1973.

29. As with medicines and poisons the responsibility for securing safe custody and proper use rests with other bodies and our concern is to ensure that householders are continually made aware of the need to dispose safely of any surplus pesticides and the methods open to them.

30. We know that the Advisory Committee on Pesticides and Other Toxic Chemicals is currently considering advice on disposal of chemicals used in agriculture and horticulture which may have relevance to the domestic market. In the meantime we consider that advice on disposal of unwanted home use pesticides should be as follows:

a. Disposal of small quantities

- i. Wherever possible pesticides should be used up for the purpose for which they were acquired in accordance with the instructions on the containers – for instance, garden pesticides sprayed or used in the garden in the normal way;
- ii. if this is not practicable, solid pesticides should be left in the container with the lid firmly closed and placed in the dustbin. Because of their low toxicity this would be unlikely to harm either the personnel or the equipment used in handling the waste. Nor are the quantities likely to be so great that they would be a problem in ultimate disposal; the pesticides are relatively harmless and when placed in tips degrade rapidly; incineration should effectively destroy them;
- iii. liquid pesticides should not be placed in the dustbin because of possible leakage from the container. Containers should be emptied into the outside sink drain, into the WC or on to soil (in premises not on main drainage disposal on to soil is preferable), and the containers placed in the dustbin. In the quantities and concentrations normally encountered, disposal into sewers is unlikely adversely to affect treatment processes at sewage works.

b. Disposal of larger quantities

An accumulation of pesticides is a potential danger in disposal; it is possible that such accumulations may include older and more toxic chemicals particularly if built up over a long period. In any event where any sizeable amount of pesticide has to be disposed of it would be prudent for the local authority to be consulted as to the most suitable and safe method.

31. We also consider that the problems of disposal of unused pesticides could be mitigated if the public were able to buy pesticides in smaller packs. Household packs are sometimes larger than required and are not always suitable or strong enough for storing. We therefore welcome the trend towards the use of convenience packs or sachets which enable a householder to limit the quantity purchased to immediate needs only and whilst recognising the present shortage of certain packaging materials, we recommend that the appropriate Government departments consider what more can be done in this direction.

Chapter 5 Sump Oil

General

32. Oil pollution in all its forms is a matter of widespread concern. The disposal of oil by do-it-yourself (DIY) motorists is a persistent addition to this wider pollution and evidence does not suggest that the increasing trend in the number of motorists changing their own sump oil is likely to be reversed. Concern at the disposal in surface water drains has been voiced by the general public, in Parliament and in the press. The London Boroughs Association in their working party report¹ on oil pollution of water courses expressed disquiet and suggested that their members should consider introducing a waste oil collection service.

33. We have discussed the problems and possible solutions with representatives of professional bodies and firms covering different facets of the oil industry. These included the Institute of Petroleum (one of whose representatives is also chairman of the Oil and Water Industries Working Group),² the Motor Agents' Association, and the oil reclamation and re-refining industry. We have also discussed design of containers with the British Tin Box Manufacturers Federation. All have accepted that there is a problem which needs to be tackled urgently.

Extent of problem

34. The Highway Statistics for 1971,³ the last published year, show that 12 million private cars and vans and 1 million motor cycles, scooters and mopeds were licensed in Great Britain. We have received conflicting evidence about the quantities of used oil requiring disposal. One estimate based on market research figures of oil consumption by private motorists indicated a figure of approximately 30 million gallons annually of which half was sold to DIY motorists for topping up and oil changes. Allowing for the amount burnt or lost by leakage a total of between 5 and 10 million gallons was disposed of by DIY motorists. Another estimate based on private car registrations set the amount of oil used annually at approximately 60 million gallons and after deducting 23 million gallons for loss by leakage and combustion, about half of the remainder, say 20 million gallons, was said to represent the disposal problem presented by DIY

¹ 1969.

² The Oil and Water Industries Working Group (O.W.I.W.G.) comprises representatives of the oil industry, river authorities, water undertakers, Government departments, research establishments and international organisations and meets to discuss matters of mutual interest.

³ H.M.S.O. 1973.

motorists. We consider it reasonable to assume that the figure of DIY oil for disposal is likely to be in the region of 10 million gallons annually.

35. As a first step we considered whether there were ways of reducing the amount of DIY oil for disposal at the home. However, it seems there is little likelihood of further increases in the miles run between oil changes in cars which in recent years has gone up from 2,000/3,000 to 5,000/6,000 miles; indeed we are told there is a reverse trend in America towards more frequent oil changes with the object of minimising air pollution. Nor does there seem any real prospect of an increase in the provision of DIY facilities at garages which we are told have proved inconvenient to the garages and have had only limited success; moreover, such a service is unlikely to be offered in exchange for purchase of oil at garages in an endeavour to recover some of the trade lost to high street shops. We are informed that sale of oil through high streets shops, supermarkets, etc., has increased fourfold in recent years and despite some decline in sales from garages the view has been consistently expressed to us that DIY oil changing is increasing and will continue to do so.

Present methods of disposal

36. Methods commonly used for disposal of oil arising from DIY operations are through surface water drains, foul sewers, in dustbins and generally indiscriminately disposed of on to land. Section 27(1)(a) of the Public Health Act 1936 makes it an offence to empty 'into any public sewer, or into any drain or sewer communicating with a public sewer any matter likely to injure the sewer or drain, or to interfere with the free flow of its contents, or to affect prejudicially the treatment or disposal of its contents; . . .'. There are good reasons for these restrictions. Oil disposed of into surface water drains invariably results in some pollution of a local ditch or stream; disposal into foul sewers could interfere with sewage processes depending on the degree of dilution. Neither of these methods should be used. Nor do we think that disposal via the household dustbin is acceptable. Whilst this method of disposal is not open to the same objection as disposal into the drainage system provided the oil is placed in the dustbin in a sealed container, there is evidence that containers may be fractured in the operation of the refuse collection equipment with possible leakage of oil on to roads. Moreover, a number of local authorities have made byelaws based on a model recommended by the Department of the Environment which prohibit among other things the disposal of any liquid matter in dustbins; we note that the recently published Protection of the Environment Bill¹ before Parliament proposes to replace the power to make byelaws by a power to make regulations. As regards disposal on open land we consider that this would be undesirable both in built-up areas and in rural areas and would certainly involve some limited land pollution.

37. We have said that DIY oil changing will increase; this means that the hazards created by unsatisfactory methods of disposal will increase too if perpetuated. It is important therefore that such methods should cease.

Acceptable methods of disposal

38. Acceptable methods of disposal of used DIY motorists' oil, indeed for that matter most used oil, would seem to be:

¹ This Bill was lost at the dissolution of Parliament in February 1974; and at the time of finalisation of this report it is not known whether the proposals in the Bill will be revived in a new form.

- a. re-use as a lubricant after re-refining;
- b. as a fuel if necessary after re-refining or cleaning;
- c. incineration.

None of these methods can be adopted for use at the place where it arises, i.e. at the home. This, therefore, must mean a form of collection at some central point but before discussing methods of doing this it is necessary to say a few words about the methods of disposal enumerated above.

39. We have been told that contractors collect substantial quantities of used oil from service garages for reclamation or disposal. These collections may be by or on behalf of the re-refining industry or by smaller contractors. The re-refining industry produces lubricants and fuels depending on the degree of contamination of the used oil and normally disposes of residues by incineration. The smaller contractors only collect the least contaminated oil for re-use as fuel. The arrangements for collection we are told vary; sometimes the contractor is required to pay for the oil he collects; in other cases the oil is collected free. In a smaller number of cases, particularly in the more remote areas, the contractor makes a charge for collection. Although in rural areas collection may sometimes present a problem, in general arrangements for the collection of used oil work reasonably well and little difficulty arises in urban areas. We have therefore discussed the possibility of using these existing outlets for dealing with DIY used oil.

40. There are 6 major re-refiners, 5 in England and Wales and 1 in Scotland. Representatives from the industry assured us that there would be no difficulty in dealing with DIY oil along with the other collected oil although it would appear that the quantity to be treated would be about doubled. The possibility that DIY oil might be substantially contaminated would not be a significant problem. The representatives of the industry did however stress that to maintain and develop such a service it was essential that the used oil should be concentrated at central collection points in minimum loads of 500 or 600 gallons.

41. We have noted the representations made by the re-refiners that a system should be introduced which would preclude those contractors who only collected the better quality used oil for sale as fuel, from leaving the poorer quality, on which there is the least financial return, to be collected by other firms. They have drawn our attention to the German Government's licensing and subsidising scheme which has enabled the industry to prosper and it is claimed there is now no problem concerning the satisfactory disposal of used oil. We understand that France is planning to introduce a subsidy system and that the European Economic Community are also studying the problem of disposal of used oil. The basis under which oil re-refiners should operate is a matter outside our terms of reference. However it has implications in relation to disposal of DIY oil and we refer to this again in the wider context of the disposal of all used oil.

42. Subject to these factors and the possible need for further processing plant it seems that a substantial part of DIY used oil can be reclaimed for use as a lubricant or as a fuel; and any remainder disposed of by incineration. There appears to be no difficulty in marketing this reclaimed oil; but in addition to existing outlets and others that may be created in private industry for it, we think that local authorities should take positive steps to promote the use of these reclaimed oils within their own organisation. Where necessary some of the more severely contaminated oil can be incinerated in municipal incinerators

along with other combustible waste provided quantities are compatible with the design parameters of the incinerator.

43. We are certain that these ought to be the disposal outlets for used DIY oil. However adoption of these methods is entirely dependent on the establishment of centralised collection points where minimum pick-up loads of at least 500 gallons can be assured. We think this should be achieved in two ways each complementary to the other. First, local authorities should provide a facility for receiving waste oil at civic amenity sites; the second facility should be provided at suitable local garages in agreement with the trade.

44. On the first proposal we have learned that some local authorities already provide suitable reception tanks at civic amenity sites or other of their depots where members of the public and business interests can deposit their used oil. With regard to provision at local garages we understand that there may be some reluctance on the part of proprietors to the setting up of collection points because of the relatively small quantity of oil involved (some of it purchased elsewhere), the need for the reception tank to be readily accessible on the forecourt of the garages and the need for supervision. Despite this however certain garages are operating a trial scheme where used oil is received from the public. It is evident to us that if DIY oil is to be channelled into the outlets we have proposed the measure of success will be directly related to the number of collection points made available to the public. We consider therefore that there is a strong case for co-operation between local authorities and the garage trade with a view to supplementing the facilities at civic amenity sites. The Motor Agents' Association have told us that they will ask their members to co-operate in discussions to this end. The Institute of Petroleum will ask the oil companies to advise their garages to co-operate in similar discussions.

45. Of course provision of the proposed central collection points is not itself a complete solution. To make it work it is necessary to get the co-operation of the public and to persuade them to bring the used oil to these centres. As an alternative to this we have considered collection from houses by local authorities either at the time of ordinary refuse collection or at some other time. Whilst we would not discourage any local authority who wished to introduce such a system we think that generally it is unlikely to be practical or economic. Nor do we regard the return of oil to the high street shop where it might have been purchased as a practicable alternative to the location of centralised collection centres we have proposed. Whilst there will always be some motorists unwilling to co-operate we consider that if the physical problems of handling the oil for return could be minimised most would be willing to do so by returning oil to the proposed centres. (See note below about the provision of temporary storage in local authority housing schemes¹).

46. To facilitate the handling of oil we have therefore considered the suitability of design of containers in which oil is sold to promote its return after use. We have discussed this with the oil and metal container industries and we under-

¹ At some local authority housing estates where garages are built in blocks return of oil to proposed central collection points may be facilitated by providing suitable temporary storage at the site. Design and cost will be considerations but such provision need not be elaborate; the main requirements would be security and ease of use including emptying. Local authorities and the housing division of the Department of the Environment might consider this.

stand that the problems are already being considered. Prototype cans have been produced which are designed not only to contain new oil but to receive oil from the sump. We know too that a firm has recently marketed a container designed specially to receive and ease disposal of used sump oil. Another possibility being considered is a separate funnel to attach to standard containers or to a plastics bag. We have also been told of the design of an automatic sump plug aimed at facilitating recovery. This would be permanently attached to the sump of the car instead of the drain plug and would by a simple operation enable the sump to be drained into a special plastics bag. We welcome these initiatives which should facilitate the drainage of sump oil and its subsequent recovery and return to central collection points.

47. The first step in introducing our proposals is for local authorities to discuss immediately with the garage trade the provision of the facilities we have recommended both at civic amenity sites and at some local garages. The addresses of the Motor Agents' Association's Divisional Offices and of the Scottish Motor Trade Association are at Appendix C. At the same time local authorities should consider with the industry the question of subsequent disposal to oil reclaimers. We consider also that they should investigate the possibility of using this oil in their local installations. On completion of these discussions local authorities should publicise as widely as possible the agreed arrangements inviting the public to co-operate.

48. The problem of used sump oil in terms of pollution and wastage of resources is a growing one and we are satisfied that the measures we have outlined need to be introduced as a matter of urgency. We hope that industry and local and central Government will work together in setting up the necessary machinery; and in providing publicity and encouragement to secure public co-operation.

49. We suggest that the situation should be reviewed by Government after a reasonable period, say one year, after these recommendations have been made public so that progress can be assessed. If at that time it appears that they are not being implemented or that little progress has been made we recommend that the Government should consider whether more positive measures are needed to achieve the objective.

50. We realise that the problem of recovery and recycling waste oil goes wider than the recovery of DIY oil alone. We are aware that disposal of waste oil arising from other sources is a cause for concern. There may be a case for Government to establish a wider inquiry into this area in conjunction with industry and other interested parties particularly to see whether incentives or stimuli should be provided to encourage recovery. It would be appropriate to include disposal of DIY oil should it be decided to establish such an inquiry.

Chapter 6 Miscellaneous Wastes

51. We have dealt in earlier chapters with individual wastes or groups of wastes which because of their particular characteristics and the quantities produced may create an environmental hazard or nuisance if disposed of in unsatisfactory ways; in some cases they cannot be disposed of by normal methods. These earlier chapters cover many of the wastes which householders may need to dispose of satisfactorily from time to time. There is however a wide range of miscellaneous products about which there may be doubts as to the appropriate ways of disposal. These are dealt with in this chapter and include aerosols which are specifically mentioned in our terms of reference.

52. We have not attempted to produce an exhaustive list – this would be lengthy and with the continuing stream of new products coming on the market would become quickly outdated. But the following items indicate the variety of wastes which we have in mind: – do-it-yourself materials such as creosote, paint, paint strippers, cellulose, emulsion paint, wallpaper adhesives, white spirit, liquid floor stain, stain remover and general adhesives; general household preparations such as disinfectants, lavatory cleaners, liquid and solid polishes, household bleach, caustic soda, kettle descalers and oven cleaners; and other miscellaneous products such as fluorescent tubes, broken glass, razor blades, and aerosols.

53. In general we do not consider that these products should present problems provided disposal is carried out sensibly and with suitable safeguards. Many of the products are in regular use and are likely to be fully used for their proper purpose. This is clearly the most satisfactory solution and empty containers can then be disposed of in the dustbin. Where however *small* quantities remain for disposal they should be dealt with in the ways set out below. Larger quantities should be taken to civic amenity sites or the local authority's advice on disposal obtained.

General household cleaners, do-it-yourself materials, paints, etc.

54.

a. General household cleaners in liquid form and similar liquid preparations

These should be flushed down the WC or washed down the outside sink drain where they will be diluted with the general drainage of the district to such an extent that they are unlikely to cause problems in sewage treatment; the container should then be placed in the dustbin.

b. Preparations similar to 'a' above in solid or semi-solid form

These should be left in the container with the lid firmly closed and placed in the dustbin.

c. Paint and other viscose preparations

These are not suitable for disposal as a liquid. They should be left in the container with the lid firmly closed and disposed of in the dustbin as for solids.

Aerosols

55. Production of aerosol containers is increasing – the 1972 figure was 360 million.

56. Our attention has been drawn to the possible dangers from explosion of aerosol containers in refuse collection and disposal equipment. In the time at our disposal we have only been able to undertake a limited survey of local authorities' experiences in handling aerosols; but we have had reports of explosions in refuse collection and disposal equipment, though in few cases have aerosols been positively identified as being responsible.

57. It is accepted that aerosol containers, because of their liability to burst when heated or when external pressure is applied, are a potential hazard although investigations have disclosed no major problems particularly in collection as a domestic waste. Research is being conducted to find an effective pressure relief device to reduce the possibility of explosion, but so far none has been found which does not lessen the safety features of the aerosol package.

58. We have concluded that the evidence of danger from the disposal of aerosol containers as a domestic waste is insufficient to justify recommending their disposal other than in the normal way in the dustbin. But we do not regard the position as wholly satisfactory, and we welcome the assurances we have received from the industry that the search for a satisfactory safety relief device will continue. In the meantime we consider that regular contact should be established between the industry, local authorities and Government to keep the situation under review.

Other miscellaneous wastes

59. a. Hearing aid and photographic batteries containing mercury

Mercury is a valuable material which can be salvaged and reused after processing in the manufacture of new batteries. A recovery scheme has been introduced by the Department of Health and Social Security under which hearing aid batteries issued through the health service to children may be returned to a Hearing Aid Distribution and Repair Centre. A further recovery scheme is operated by the main manufacturer of these batteries. Under it incentives are given to both purchaser and retailer to return the used batteries, via the retailer, to the manufacturer. The latter scheme applies also to hearing aid clubs run by the Royal National Institute for the Deaf who return the batteries direct to the manufacturer.

Wherever possible such batteries should be disposed of through a recovery scheme. Where this is not practicable these and photographic batteries can safely be disposed of in the dustbin with normal household refuse. They should not be burnt.

b. Fluorescent tubes

These may burst in refuse collection vehicles. To minimise any danger the used tube should be placed in the container in which the replacement tube is supplied and put alongside the dustbin for collection.

c. Broken glass, razor blades, etc.

These should be wrapped before being placed in the dustbin.

60. We strongly recommend that householders should consult their local authority on the disposal of any other items which they consider might be of a hazardous nature.

Chapter 7 Bulky Household Discards

CIVIC AMENITIES ACT SITES

General

61. The Civic Amenities Act 1967 received Royal Assent in July 1967. Section 18 lays on local authorities¹ the duty of providing places where refuse, other than business refuse, may be deposited by local residents free of charge, and by other persons on payment of such charge as the authority think fit. Under the Act local authorities may provide sites outside their own area or may combine for the purpose of this section with other local authorities. Sites outside the authority's area must be reasonably accessible to residents in their area. Sites must also be open for the deposit of refuse at all reasonable times.

62. We are required under our terms of reference to examine the working of this section of the Act. In the time at our disposal we have not carried out a detailed investigation of the extent to which sites are being provided. What we have done is to draw on our combined experiences and our knowledge of the operation of the Act in other areas to try and identify the most acceptable way of providing civic amenity sites under the Act and the controls which should operate for the benefit both of the local authority and the public. We hope that our findings will be of practical use to existing authorities and for the new authorities which come into being in 1974.

Need

63. We have considered firstly whether the provision of these sites is serving a useful purpose and whether there is a continuing need for them. But we acknowledge straight away that this matter cannot be looked at in isolation from the special collection facilities for bulky refuse which some local authorities provide and which, until the Civic Amenities Act, represented the only organised facility available to the public for the disposal of bulky refuse. (Special collections are discussed in paragraphs 71–73).

¹ Defined in the section as, in England and Wales the council of a county borough or county district or the Greater London Council. In Scotland responsibility rests with the town and county councils. Under the Local Government Act 1972 from 1.4.74 the appropriate authorities in England are the council of a county and the Greater London Council and in Wales the council of a district as disposal authorities. Under the Local Government (Scotland) Act 1973 responsibility will be transferred to district and islands councils from 16.5.75.

64. From members' own experience and knowledge of the operation of the Act in other areas, we are agreed that civic amenity sites meet a real need. The use of the facilities is increasing and has done so since the Act's inception. There are clearly local variations in the pattern of use not only between one local authority and another but within the local authority's own area. Amounts deposited show a marked increase in response to publicity campaigns and particular situations where, for example, residents are moving into new estates or there are particular promotion drives, e.g. double glazing. There is also seasonal variation with greater use in the spring and, where sites are open, at bank holidays. Our experience indicates in general that the refuse deposited at civic amenity sites is in the region of 3-4 per cent of the total refuse input from all sources. In Greater London the tonnage of refuse received at civic amenity sites has increased from 5,500 tons in 1968/69 to a figure currently running in the region of 100,000 tons a year. This represents 4 per cent of all refuse delivered to the Greater London Council from all sources. Wetherby Rural District Council receives about 3 per cent of its total refuse input by deposit at civic amenity sites; and the quantities deposited are increasing at the rate of about 5 per cent annually.

65. We are not aware of any circumstances at the present time which are likely to alter this trend. The pattern of modern life with its emphasis on change, built in obsolescence and the high cost of labour and consequent growth in do-it-yourself activities all suggest that the increase is likely to continue. We welcome this continued increase in the use of these facilities as it indicates a greater public concern for the environment. It is therefore important that sites should not be operated restrictively and local authorities should be prepared to accept almost any wastes from members of the public, even those resident outside their area.

Site requirements

66. We have considered what are the basic criteria for determining location and ensuring satisfactory operation of civic amenity sites. These are in our opinion:

- a. the need for constant supervision;
- b. security;
- c. availability.

a. Constant supervision

Experience has shown that constant supervision is absolutely essential to the satisfactory operation of a site both for efficiency of working and to eliminate danger to users. An unsupervised site almost always encourages an uneconomic use of land and facilities and quickly becomes an eye-sore and a nuisance. We are satisfied that an unmanned site should never be provided. With a properly managed site residents can be directed to the reception area and help given where needed. Residents are not as expert as council employees in handling awkward items; and there is a continuing risk of injury. Supervision will minimise this and enable necessary control to be exercised to prevent the site becoming unsightly. It will also help to ensure that all items are, as far as possible, rendered safe before being deposited.

b. Security

An unfenced site is subject to the same objection in that it is likely to become an

eye-sore and a nuisance; it is also likely to be a target for children and looters. We are satisfied that proper fencing is an essential and that the site should be secure at all times.

c. Availability

We consider that adequate hours of opening are important both to ensure that the public are able to deposit refuse when it is convenient for them to do so and to prevent off-site dumping. The times of opening are clearly for the local authority to decide in the light of their local knowledge but we consider that in addition to weekday opening the site should be open at weekends. This is the time when the facilities are in the greatest demand and in our view the minimum weekend opening should be Saturday and Sunday mornings. There is also a case for opening at some bank holiday periods. Sites should be adequately lit during the hours of opening.

67. These basic findings point conclusively to the provision of fewer but more centralised controlled sites; only in this way are the objectives outlined above likely to be achieved. This means that the placing of large containers in convenient but unmanned locations to comply with the Act is in no way acceptable. It could also mean that the public would have to travel greater distances to dispose of refuse. But our experience and consultations with others indicate that where this has been necessary it has not of itself proved a disincentive to the use of civic amenity sites. Persons using a site almost always have the use of transport – a family car or perhaps combining with neighbours to hire a van if a particularly large amount of refuse needs to be disposed of. In these circumstances the distance travelled to a site is not critical. Whilst the number of sites required will depend on local circumstances, we have concluded that the catchment area for a site need not be too restricted.

Disposal sites

68. It seems to us that these centralised sites can best be located at local authority depots, refuse treatment plants or at local authority tips where constant supervision, security and availability can more easily be provided. Where these locations are insufficient any new sites should be in accordance with these criteria. The following paragraphs outline appropriate ways of providing facilities at each place:

a. Local authority depots

The way a depot is adapted to meet the need is for local decision in the light of local circumstances. We think however that a container system could be introduced. Ideally the deposit of refuse by members of the public should take place when no official vehicles are working on the site. This is not however practicable and care needs to be taken in stationing the containers so that any likely danger from movement of such vehicles is eliminated. There should be sufficient room in the vicinity of the containers for cars and other vehicles used by the public to manoeuvre and the area should be provided with a hard surface which can be kept clean and drained.

The siting of the containers must depend on local circumstances. There are arguments for and against siting them near the depot's entrance, but much will depend on access and the need to maintain a high standard in the appearance of the site.

b. Local authority refuse treatment plants

We are agreed that here the overriding consideration must be public safety; and that the public and their vehicles ought to be kept away from any tipping hopper. In our view, containers should be provided for the reception of refuse sited well away from the machinery and the area used by collection vehicles; they should be as near as possible to the entrance to the plant consistent with maintaining the appearance of the site and the safety of traffic seeking to enter it.

c. Tip sites

We have some reservations about allowing the general public to deposit refuse near the tip face itself. If they are permitted in the vicinity careful supervision is essential, and an area provided for their use away from the active face used by the local authority vehicles. Alternatively a route could be provided to the toe of the tip face, again away from the operational area; this would help to prevent accidents and enable the refuse to be dealt with by council employees later. We consider however that on grounds of safety there is much to be said in favour of locating containers on a hard site near the tip entrance; but not so near as to encourage tipping outside the entrance when the site is closed.

d. New sites

Where it is proposed to set up new sites some further factors will need to be considered. These include the availability of good approach roads giving reasonable access to the site from all parts of the area; landscaping the site to minimise its impact on the surroundings; and measures to discourage the dumping of waste outside the site when it is closed. An important point in deciding location is that, in members' experience, once a site has been opened it cannot easily be closed down. A layout containing some of the desirable features in a purpose-built site is at Appendix D.

Containers

69. The design and number of containers will depend on the needs of the particular area and the conditions of the site itself. A further consideration will be the local authority's policy with regard to salvaging waste materials such as scrap metal for re-use or recycling (this is important in making the maximum use of resources). Thus some local authorities may find it convenient to arrange for some form of segregation of waste to facilitate recycling or final disposal. Having regard to our conclusions on the re-use and disposal of used sump oil, appropriate receptacles, suitably protected, should be provided expressly to receive this used oil.

70. The size of container will vary according to local circumstances; in our view the minimum size ought to be 12 cubic yards. We do not think that we can usefully suggest the number of containers which should be made available; this can only be assessed by each local authority in the light of their knowledge of local conditions, frequency of emptying, etc., but we would strongly recommend over, rather than under, provision with a minimum of two containers alternately receiving waste. Additional containers are likely to be needed at busy periods especially at weekends or in the spring when do-it-yourself activities are most in evidence. We have considered the various types of containers and

are agreed that, given care in use, most types are reasonably satisfactory. The open-ended container nevertheless has advantage in allowing economical packing under supervision. Where refuse is to be segregated, brick enclosed bays would facilitate this.

SPECIAL COLLECTION SERVICE OF BULKY OR OTHER HOUSEHOLD DISCARDS

71. The provision of civic amenity sites has not however made the special collection of refuse from residents' homes an unnecessary service; quite the contrary. We are convinced that both civic amenity sites *and* special collections are needed. The special collection provides a very necessary service allowing elderly residents or those residents without suitable transport to have bulky items and other awkward wastes removed. Civic amenity sites on the other hand provide the opportunity for these items to be disposed of at residents' own convenience; they have the added advantage of enabling items to be disposed of speedily. But this does not provide grounds for reducing or not instituting special collections thus off-loading local authority responsibilities for the more awkward items of refuse on to private individuals. The balance between the two services needs to be decided in the light of local circumstances; for example, in areas where provision of an adequate number of manned civic amenity sites would be difficult it might be appropriate to expand the special collection service.

72. Provision of special collection facilities varies; some local authorities provide the service free while others make a charge. Limitations may also be put on the type of refuse collected. Our experience indicates that requests for the service can cover a wide range of items from household equipment to tree loppings. We consider that the special collection ought to be free as recommended by the Working Party on Refuse Collection in paragraph 609 of their report¹ although we accept that a case can be made for charging for particularly difficult items. As for items which should be included in such a service, we consider that as a guide, a reasonable dividing line should be everything which is produced by the householder as a result of his own efforts. Refuse stemming from work carried out by contractors within the curtilage of dwellings, for example builders' debris, should be for the contractors themselves to arrange removal, though the disposal authority should be prepared where needed to afford means of satisfactory disposal. In this connection we note that the Protection of the Environment Bill² includes proposals broadly in line with our views.

73. It is important that applications for special collections should be dealt with quickly. This can best be achieved by a system under which applications from householders either oral or written are recorded by the local authority in standard form. This ensures that the items are identified and reduces the possibility of wrongful removal; it also enables better controls to operate and collection routes to be planned. We think it sensible to require that items for collection are reasonably accessible normally at ground level, are not potentially dangerous to the collectors and are capable of being lifted by two men. It would also be reasonable to ask householders to ensure that items are, where appropriate, placed in receptacles for ease of handling.

¹ Refuse Storage and Collection—H.M.S.O. 1967.

² This Bill was lost at the dissolution of Parliament in February 1974; and at the time of finalisation of this report it is not known whether the proposals in the Bill will be revived in a new form.

Chapter 8 Publicity

74. It is essential that our recommendations for secure and safe disposal of wastes are kept constantly before the public by sustained publicity. Local authorities can do this directly or by co-operating with local organisations who share similar objectives.

75. Methods of publicity available to local authorities include features in the press, advertising in local newspapers and other local publications, posters, leaflets and cinema advertising. Local newspapers may run illustrated features into which can be built accounts of any local disposal facilities such as civic amenity sites and collection centres for used sump oil.

76. Medium and small-sized posters will ensure the maximum number of advertising sites. Possible sites include church halls, public notice boards, shops and garages, as well as libraries and municipal offices. We consider also that there should be a direct approach to householders by sending leaflets with any council mailing such as rate demands, or via the refuse collection service. A form of leaflet which local authorities can adapt is at Appendix E. A number of slides for showing at intervals at local cinemas could also be prepared.

77. Wherever possible publicity for disposal methods for particular wastes should be at appropriate sites to reinforce the message. For example, notices and leaflets relating to disposal of medicines, poisons and medical wastes should be displayed in doctors' waiting rooms, health centres, hospital out-patients departments and chemists' shops; disposal of pesticides at gardening shops and nurseries, and used sump oil at high street shops, garages and motor accessory shops.

78. Civic amenity sites need to be well publicised and posters and leaflets should give an indication of the type of wastes which will be accepted, the site's location (a location plan would be helpful) and hours of opening. Except for location, this information should also be displayed at the entrance to the site. Opening of new sites should also be well publicised.

79. Local authorities should make sure that householders know of the special collection service and what they need to do to obtain this service.

80. Government departments can help to publicise our recommendations by bringing these to the attention of national and local bodies with which they have contact and seeking their co-operation; for example, hospital boards and health authorities might be asked to display appropriate notices in their establishments setting out our recommendations about medicines, poisons, etc. (Department of Health and Social Security). Relevant trade associations might be asked to

bring the recommendations to the attention of their members (Department of Trade and Industry). The Department of Trade and Industry, the Ministry of Agriculture, Fisheries and Food and the Department of Health and Social Security should also discuss with appropriate trade associations the feasibility of publicising acceptable disposal methods on containers and packets in which their products are sold.

81. We hope also that the Government will consider giving wider publicity to our recommendations by the use of press, radio and television coverage.

Chapter 9 Summary, Conclusions and Recommendations

(The numbers in brackets refer to paragraphs in the report.)

82. This investigation has been concerned with advice to householders about satisfactory methods of dealing with awkward household wastes including bulky discards. It is important that wastes should be got rid of speedily and our conclusions and recommendations are intended to facilitate this and to make disposal as straightforward and as easy as possible. We hope that the Department of the Environment will ask local authorities to bring urgently to the attention of householders in their areas our advice and recommendations. Attention is drawn also to other recommended action by Government, local authorities and industry.

Medical and Nursing Wastes (Chapter 2)

83.

- a. Surgical dressings and similar wastes should be wrapped and placed in plastics or other suitable disposable bags for local authority special collection. Where there is no special collection service for these wastes they should be placed in plastics bags or otherwise suitably wrapped and placed in the dustbin (9);
- b. medical syringes (plastics). The needle cap should be replaced and the syringe snapped across the needle mount before being wrapped and placed in the dustbin (10a);
- c. colostomy bags should be emptied down the WC and the bags wrapped for disposal (10b).

Medicines and Poisons (Chapter 3)

84. The main objective must be day-to-day disposal of unwanted medicines and poisons. Disposal by burning, burying, or by placing in the dustbin or litter basket is unacceptable (15, 17).

85. Two methods only are recommended:

- a. by flushing down the WC; the bottle or container should then be placed in the dustbin (16a);
- b. by return to the local authority or to an agreed collection point (16b).

86. Collection campaigns should be organised to clear existing stocks of medicines and poisons. Further campaigns may be needed from time to time to monitor the effectiveness of day-to-day disposal procedures (18).

87. To implement paragraphs 16–22 local authorities should:

- a. consider setting up permanent collection centres and publicise the agreed facilities (16, 17);
- b. discuss with local pharmacists, the Pharmaceutical Society of Great Britain, RoSPA and interested local bodies the organisation of collection campaigns to clear existing stocks (22);
- c. from time to time review the need for further campaigns (18).

Pesticides (Chapter 4)

88. Pesticides used in the home and garden are invariably less toxic than those used commercially and are not scheduled under the Agricultural (Poisonous Substances) Regulations (25).

89. The recommended methods of disposal for *small* quantities are:

- a. wherever possible use for the purpose for which they were acquired;
- b. solid pesticides should be left in the container with lid firmly closed and placed in the dustbin;
- c. liquid pesticides should be emptied into the outside sink drain, the WC or on to soil and the container placed in the dustbin. (In premises not on main drainage emptying on to soil is preferable) (30a).

90. For larger quantities of pesticides the local authority should be consulted about satisfactory methods of disposal (30b).

Sump Oil (Chapter 5)

91. More motorists are changing their own sump oil. Disposal into surface water drains invariably results in some pollution of local ditch or stream and disposal into sewers could interfere with sewage processes. Disposal via the dustbin is unacceptable and on to land undesirable. None of these methods should be used (32, 36).

92. The used sump oil can be reclaimed for re-use as a lubricant or as a fuel; any remainder should be incinerated. The reclamation industry require minimum pickup loads of 500/600 gallons at central collection points. Such collection facilities should be set up at civic amenity sites and at some local garages. Suitable containers are needed to encourage motorists to return the used sump oil to these collection points (38, 40, 43, 46).

Local authorities should

93.

- a. Provide collection facilities for used sump oil at civic amenity sites (43);
- b. discuss with the oil companies and the motor trade provision of facilities at suitable garages to complement those at civic amenity sites (addresses of the Motor Agents' Association's Divisional Offices and the Scottish Motor Trade Association are at Appendix C) (47);
- c. discuss with the reclamation industry the collection of this oil for re-refining and re-use (47);
- d. consider how the reclaimed oil might be used in their local installations (47);
- e. give maximum publicity to these arrangements (47).

94.

- a. The oil industry and the Motor Agents' Association should ask the garage trade to discuss with local authorities the provision of collection points (44); and
- b. both industries should continue consideration of the design and marketing of suitable containers to facilitate return of used sump oil to the central collection points (46).

Miscellaneous Wastes (Chapter 6)

95. These include general household cleaners, do-it-yourself preparations, paints, aerosols, fluorescent tubes, hearing aid and photographic batteries (52, 59).

96. Many of these items are best disposed of by using them up for the purpose for which they were acquired (53). Otherwise small quantities should be disposed of as follows:

a. General household cleaners, DIY materials, paints, etc.:

- i. general household cleaners in liquid form and similar liquid preparations should be flushed down the WC or washed down the outside sink drain and the container placed in the dustbin;
- ii. preparations similar to 'i' above in solid or semi-solid form should be left in the container with the lid firmly closed and placed in the dustbin;
- iii. paint and other viscose preparations should be left in the container with the lid firmly closed and placed in the dustbin;
- iv. where there are large quantities of wastes these should be taken to a civic amenity site or the local authority consulted on disposal (53, 54).

b. Aerosols

These should be placed in the dustbin (58).¹

c. Hearing aid and photographic batteries containing mercury

Hearing aid batteries should be disposed of through recovery schemes wherever possible; otherwise these and photographic batteries may be placed in the dustbin (59a).

d. Fluorescent tubes

These should be placed in the container in which the replacement tube is supplied and put alongside the dustbin for collection (59b).

e. Wastes which could cause injury in handling

Glass, razor blades, etc., should be wrapped before disposal in the dustbin (59c).

97. Householders should consult the local authority about other items of waste which they consider might be of a hazardous nature (60).

¹ In order to reduce any hazard from disposal of aerosols, industry is continuing the search for a satisfactory safety release device. In the meantime regular contact should be established between industry, local authorities and Government to keep the situation under review.

Bulky Household Discards (Chapter 7)

98. Both civic amenity sites and special collections are essential facilities for disposal of bulky household discards (71).

Civic amenity sites

99. Basic essentials are:

- a. constant supervision;
- b. security;
- c. availability (66).

100. Adoption of these criteria means provision of fewer but more centralised sites; the placing of large containers in convenient but unmanned locations is not acceptable. These criteria can best be met at local authority depots, refuse treatment plants and at local authority tips (67, 68).

101. Where it is necessary to set up new sites additional considerations are the availability of good approach roads, giving reasonable access to all parts of the area, good landscaping, and measures to discourage the dumping of waste outside the site when it is closed (68d).

102. In the majority of cases good management of a civic amenity site will be achieved by the provision of containers. Most types of container are suitable provided they are of at least 12 cubic yards capacity; a minimum of two should be supplied. A separate reception tank will be required to receive used oil (68, 69, 70).

Special collection service

103. This should cover everything a householder produces by his own efforts. A system of notification by the householder will facilitate a planned collection. Generally the service should be free but local authorities should have discretion to charge for particularly difficult items (72, 73).

Publicity (Chapter 8)

104. Sustained publicity is needed to secure appropriate and speedy disposal of awkward wastes (74).

Local authorities should:

105.

- a. Send details of our recommended disposal methods to all residents in their areas (suggested form of leaflet is at Appendix E) (76);
- b. provide other forms of publicity where appropriate in conjunction with local organisations (75, 76, 77);
- c. give publicity to the provision of civic amenity sites, including hours of opening (78);
- d. publicise details of the special collection service (79).

Suggested Government Action Arising from the Terms of the Report

106. We recommend that the Government should:

- a. consider with industry what more can be done to extend the use of convenience packs for the marketing of pesticides (31);

- b. i. co-operate with the oil industry and local government in setting up the necessary organisation for recovery of used sump oil (48);
- ii. review the situation after 1 year from the publication of these recommendations to assess progress and consider whether more positive measures are needed (49);
- iii. consider whether there should be a wider investigation in conjunction with industry and other interested parties into the recovery and recycling of all waste oil including the provision of incentives (50);
- c. establish with the aerosol industry and local authorities arrangement for keeping the situation with regard to the disposal of aerosols under review (58);
- d. use the points of contact central Government departments have with official bodies and with industry to promote these recommended disposal methods (80);
- e. use all possible measures to secure full coverage of these recommendations through press, radio and television (81).

(Signed)

J. Sumner (Chairman)
E. P. Allen
P. Cartwright
A. L. Good
J. A. Hinchliffe
L. M. T. Hopkin
O. G. Hughes
R. G. MacWilliam
J. Marriott
W. E. Outterside
D. S. Papworth
W. Parker
N. R. W. Taylor

R. M. Clarkson (Secretary)
W. J. Flux (Assistant Secretary)

November, 1973

Appendix A

LIST OF ORGANISATIONS WHO PROVIDED EVIDENCE OR INFORMATION

Alexander Duckham and Company Limited
Amicoil Limited
Association of London Borough Engineers and Surveyors
Association of London Cleansing Officers
Association of River Authorities
Bell Products
British Aerosol Manufacturers' Federation
British Petroleum Company Limited
British Tin Box Manufacturers Federation
Burmah-Castrol Company
Butler Chemicals Limited
Castrol Limited
City of Bradford Cleansing Department
City of Westminster Cleansing Department
Department of Health and Social Security
Department of Trade and Industry
Easthampstead Rural District Council
Essex County Council
Esso Petroleum Company Limited
Greater London Council
Home Office
Inland Waterways Association
Institute of Petroleum
Institute of Water Pollution Control
London Boroughs Association
London Borough of Barking
Metal Box Company Limited
Ministry of Agriculture Fisheries and Food
Motor Agents' Association Limited
Pharmaceutical Society of Great Britain
R. Harrop Phillips and Company Limited
Royal Society for the Prevention of Accidents
Scottish Motor Trade Association Limited
Shell Mex & BP Limited
Warwickshire Federation of Women's Institutes

Appendix B

(Paragraph 26)

PESTICIDES – AMATEUR GARDEN CLEARANCES

| <i>Compound</i> | <i>Restriction, qualifications</i> |
|-----------------------------------|---|
| Acrylic copolymer emulsion | Antitranspirant at transplanting. |
| Aluminium ammonium sulphate | Bird and animal repellent. |
| Aluminium sulphate | Molluscicide. |
| Aminotriazole | Paths and drives, application by watering can. |
| Aminozide | Growth regulator, ornamentals only. |
| Ammonium sulphamate | None. |
| Anthraquinone | Bird repellent on non-edible crops, fruit trees and bushes before flowering, and vegetables at seedling stage only. |
| Atrazine | Not over 4 per cent, paths, drives and paved areas only. |
| Bacillus thuringiensis | None. |
| γ-BHC | Harvest interval 14 days for liquid and solid concentrate and dust, 2 days for aerosols and smokes. |
| Bone oil | Any crop. |
| Bromophos | On brassicas, carrots, parsnips, celery, onions, fruit, other edible crops and ornamentals, harvest interval 7 days. |
| Cadmium compounds | Not to be used. |
| Captan | None. |
| Carbaryl | On ornamentals, top fruit, blackcurrants, gooseberries, strawberries, tomatoes, brassicas, peas, lettuce and as wormkiller on turf and lawns; harvest interval 7 days. Dangerous to bees. |
| Chlordane | Not over 25 per cent, or 20 per cent if granular. Earthworm and ant killer, not on food crops. |
| Chlordecone | As ant bait, not over 0.25 per cent. |
| Chlorinated camphenes (Toxaphene) | Worm killer on turf and lawns. |
| Chlorphonium | Growth regulant on chrysanthemums and other ornamentals, not on food crops. |
| Copper compounds | None. |
| Copper sulphate | Earthworm killer. |

| <i>Compound</i> | <i>Restriction, qualifications</i> |
|--------------------|--|
| Cresylic acid | Soil steriliser and weedkiller. Ventilate during and 24 hours after use in greenhouses. |
| 2,4-D | None. |
| Dalapon | None. |
| Dazomet | Soil sterilant as prills. |
| Derris | Harvest interval 1 day. Dangerous to fish. |
| Diazinon | Harvest interval 14 days. Harmful to bees (not granules). |
| Dicamba | None. |
| Dichlobenil | None. |
| Dichlofluanid | On apples, blackcurrants, gooseberries, raspberries, blackberries, loganberries, strawberries, ornamentals. Harvest interval 3 weeks. |
| Dichlorprop | None. |
| Dieldrin wasp bait | Not to be used. |
| Dimethoate | Not over 16 per cent. Harvest interval 7 days. Harmful to bees. |
| Dinocap | Harvest interval 7 days. |
| Diquat | Pellets only, application by watering can. |
| Diuron | For weeds on drives, paths, hard tennis courts and waste land. |
| DNOC | Not over 2.5 per cent. Winter wash on dormant trees, bushes and canes. |
| Fenitrothion | Harvest interval 1½ days. |
| Fenoprop | None. |
| Fluoroacetamide | Not to be used. |
| Folpet | Flowers only. |
| Formaldehyde | Soil steriliser. |
| Formothion | Harvest interval 7 days. |
| Ioxynil | On seedling lawns only. |
| Lenacil | On land growing top fruit, soft fruit and ornamentals. |
| Lime sulphur | None. |
| Malathion | Harvest interval 1 day. |
| Mancozeb | On non-edible crops, apples, blackcurrants, celery, lettuce and tomatoes. Harvest interval 2 days for tomatoes, 7 days for other food crops. |
| Maneb | Harvest interval 2 days for crops under glass, 7 days for outdoor crops. |
| MCPA | None. |
| Mecoprop | None. |
| Menazon | None. |
| Mercuric chloride | Not to be used. |
| Mercurous chloride | For soil application, dips for brassica transplants, or moss killer on lawns only. |
| Metaldehyde | Solid fuel; dangerous to children. Formulated product; harvest interval 10 days. |
| Methiocarb | As pellet bait. |
| Monolinuron | On paths and drives. |
| Morphamquat | As lawn herbicide, application by watering can. |

| <i>Compound</i> | <i>Restriction, qualifications</i> |
|---|--|
| Nabam | For soil sterilisation. |
| Nicotine | Not over 7·5 per cent. Harvest interval 2 days. |
| Oxydemeton-methyl | 0·25 per cent aerosol, harvest interval 3 weeks. |
| Paraquat | Pellets only, application by watering can. |
| Pentachlorophenol | Timber preservative only. |
| Phosphine pyrotechnic mixtures | Rabbit, rat and mole killing. |
| Polyvinyl acetate | Paint formulations on growing trees and shrubs. |
| Propachlor | On ornamentals, root and leaf brassicas, onions, leeks. |
| Propoxur | On outdoor crops, or as 1 per cent dust on indoor plants, harvest interval 7 days; as 1 per cent ant bait, kept away from food or crops. |
| Pyrethrum | None. |
| Quassins | None. |
| Selenium compounds | Not to be used. |
| Simazine | None. |
| Sodium chlorate | On drives, paths, hard tennis courts and waste land. |
| Sulphur | When used as fumigant, prevent access till ventilated. No restrictions for other uses. |
| 2,4,5-T | None. |
| Tar oil | Winter wash on dormant trees, bushes, canes or vines. |
| 1,1,2,2-tetrachloroethane | Not to be used. |
| Thallium sulphate | Not to be used. |
| Thiram | As fungicide, harvest interval 7 days. As bird repellent, only on young brassicas, fruit bushes and trees before flowering, and on non-edible crops. |
| N-trichloromethyl thiophthalimide ('Phaltan') | On flowers only. Harmful to fish. |
| Trichlorphon | Liquid or solid concentrate, or dust not over 5 per cent, harvest interval 2 days. One per cent ant bait, kept away from food crops. |
| Zineb | Harvest interval 2 days for crops grown under glass, 7 days for crops grown outdoors. |
| Ziram | Harvest interval 7 days. |

Appendix C

(Paragraph 47)

MOTOR AGENTS' ASSOCIATION'S DIVISIONAL OFFICES AND AREA COVERED BY EACH OFFICE

ENGLAND AND WALES

| <i>Division</i> | <i>Address</i> | <i>Secretary</i> |
|--|---|------------------|
| Chiltern covering Berkshire South Buckinghamshire Oxford | Portman House George Street Aylesbury, Bucks Tel: 0296 81118 | W. D. Evans |
| Cornwall covering East Cornwall West Cornwall | Barclays Bank Chambers 164 Armada Way Plymouth Tel: 0752 65887 | P. Graham |
| Cumberland and Westmorland covering Barrow/Kendal Carlisle and District West Cumberland | 6/8 Bank Street Carlisle Cumberland Tel : 0228 31613 | W. A. Talbot |
| Devon covering Exeter North Devon Plymouth Torbay | Barclays Bank Chambers 164 Armada Way Plymouth Tel: 0752 65887 | P. Graham |
| East Lancs and Cheshire covering Blackburn and Mid Lancs Blackpool, Preston and Fylde Lancaster and Morecambe North East Lancs South Cheshire Manchester | 35 St. Werburgh Row Chester Tel: 0244 47484/5/6 | D. Wilkinson |

| <i>Division</i> | <i>Address</i> | <i>Secretary</i> |
|--|---|------------------|
| East Midland covering Boston and District Chesterfield and District Derby and District Grantham and District South Humberside Leicestershire and Rutland Lincoln Newark and District Nottinghamshire Worksop and Retford | 1c Devonshire Avenue Beeston Nottingham NG9 1BS Tel: 0602 251033 | R. J. Symons |
| East Wales covering Cardiff and District Mid Glamorgan Mid Wales Monmouthshire North Glamorgan | 73 Park Street Bristol BS1 5PS Tel: 0272 293232 | D. A. J. Walters |
| Eastern Counties covering Bury St. Edmunds Cambridge Chelmsford Colchester Fakenham Ipswich King's Lynn Norwich | Commerce Chambers 14 High Street Ipswich IPI 3JX Tel: 0473 51509 | J. Parker |
| Metropolitan covering Bromley and District Central and West London Hertfordshire Ilford and District Kingston and District Northern North-West Middlesex South-East Essex South London, Croydon and District | 54/55 Margaret Street London WIN 7FF Tel: 580 8972/3 | G. R. Chandler |
| North Eastern Counties covering Alnwick and Berwick Hexham South-West Durham Teesside Newcastle | 6/8 Bank Street Carlisle Cumberland Tel: 0228 31613 | W. A. Talbot |
| North Wales covering Anglesey and Caernarvonshire East Denbighshire/East Flintshire West Denbighshire/West Flintshire Merioneth and Montgomery | 35 St. Werburgh Row Chester Tel: 0244 47484/5/6 | D. J. Rider |
| South-East Midland covering Bedfordshire Northamptonshire Peterborough | Portman House George Street Aylesbury, Bucks Tel: 0296 81118 | W. D. Evans |

| <i>Division</i> | <i>Address</i> | <i>Secretary</i> |
|---|---|------------------|
| South-Eastern covering East Kent Mid Kent East Surrey Mid Surrey Farnham East Sussex Mid Sussex West Sussex | Imperial Buildings Victoria Road Horley, Surrey Tel: 02934 6310/2935 | R. H. Parsley |
| Southern covering Basingstoke Bournemouth Isle of Wight Portsmouth Salisbury Southampton | 73 Park Street Bristol BS1 5PS Tel: 0272 293232 | J. C. Southwick |
| West Lancs and Cheshire covering Chester Liverpool and South-West Lancs Southport, Ormskirk and Formby Wirral | 35 St. Werburgh Row Chester Tel: 0244 47484/5/6 | A. Lewis |
| West Midland covering Birmingham Burton Coventry Herefordshire Potteries Shropshire South Shropshire South Staffs Worcester | 'Sardon House' 103 Bristol Road Birmingham 5 Tel: 021 440 4181 | M. E. Roberts |
| West Wales covering Aberystwyth Carmarthen, Cardigan and Pembroke Swansea | 73 Park Street Bristol BS1 5PS Tel: 0272 293232 | C. E. Boor |
| South Western and Western Counties covering Gloucestershire Somerset Dorset Bristol Swindon | 73 Park Street Bristol BS1 5PS Tel: 0272 293232 | E. W. Beech |
| Yorkshire covering Bradford Dales Doncaster Halifax Harrogate Hull Huddersfield Leeds Sheffield Scarborough Skipton York and Malton | 10/14 Royal Chambers Station Parade Harrogate, Yorks Tel: 0423 68731 | J. Midgley |

SCOTLAND

Scottish Motor Trade Association

Address

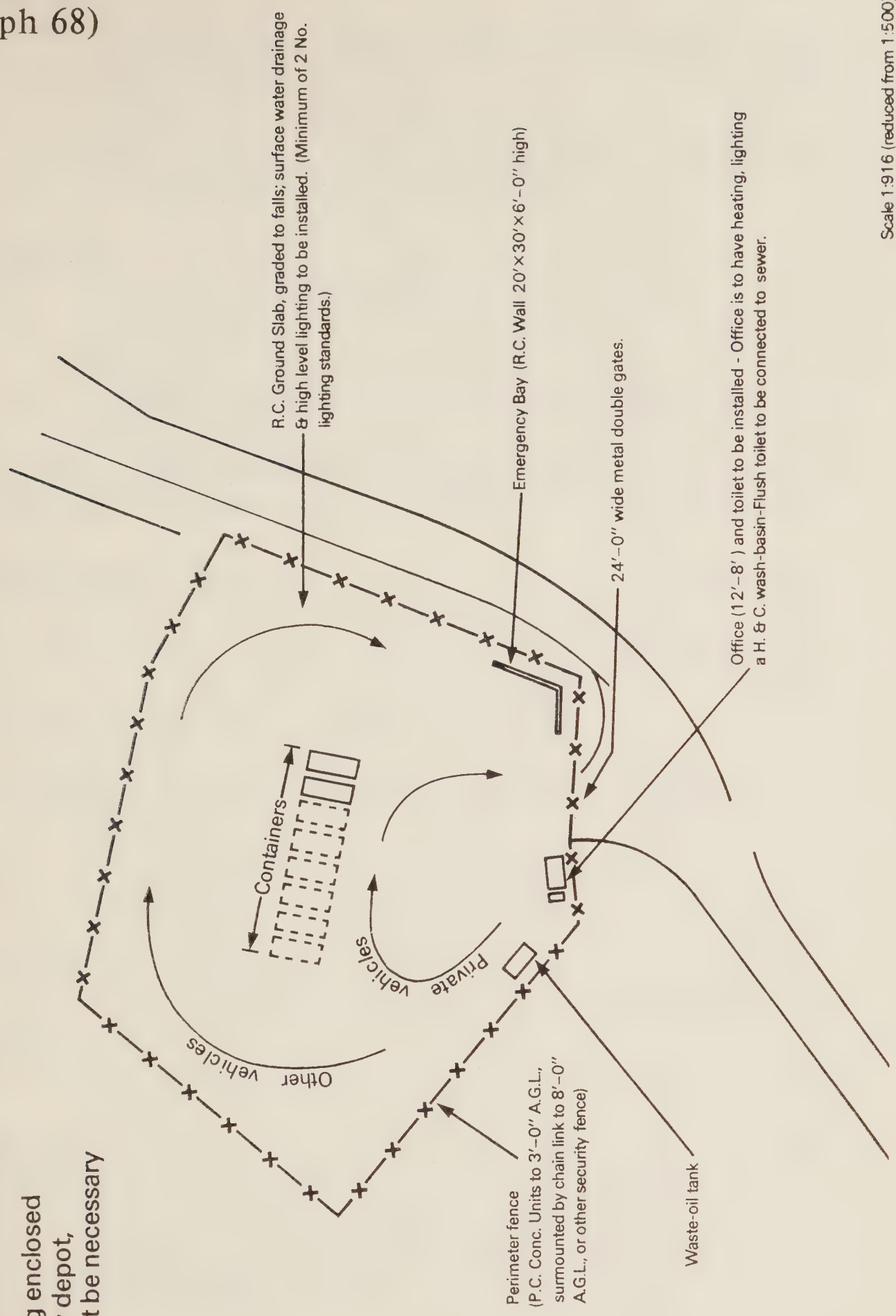
3 Palmerston Place
Edinburgh 12
Tel: 031 225 3643

Secretary

D. L. Fairley

TYPICAL "CIVIC AMENITY" SITE
SHOWING SOME DESIRABLE FEATURES

Where site is at an existing enclosed
and fenced local authority depot,
additional fencing may not be necessary



Appendix E

(Paragraph 76)

SPECIMEN LEAFLET

PROPER WASTE DISPOSAL MEANS LESS POLLUTION

Unwanted household items should not be hoarded. But some are awkward to dispose of. This can be done safely if you follow these simple 'DOs' and 'DON'Ts'.

GENERALLY:

DON'T Hoard unwanted items.

DON'T Put liquids into the dustbin.

DO Use products wherever possible for the purpose for which they were required.
Make sure container lids are firmly closed before placing in the dustbin.
Ask your local authority if you are not sure what to do.

PARTICULAR WASTES REQUIRE SPECIAL TREATMENT

MEDICAL AND NURSING WASTES: SURGICAL AND SIMILARLY SOILED DRESSINGS, PLASTICS SYRINGES, ETC.

DON'T Place sharp objects (medical syringe needles, etc.) in the dustbin without first wrapping them.

DO Place medical and nursing wastes in plastics or other suitable disposable bags and make use of any special collection arrangements your local authority may have for this type of waste; otherwise place the bags in the dustbin.
Replace needle caps on plastics medical syringes and snap the syringe across the needle mount before wrapping and placing in the dustbin.

MEDICINES AND POISONS

DON'T Put them in the dustbin, or litter basket.

DON'T Burn or bury them.

- DO** Flush surplus medicines and poisons down the WC and put the container in the dustbin;
or return them to your nearest collection point at.....
.....
Tell your local authority if you have a stock of unwanted medicines.
Take advantage of any collection campaign.

PESTICIDES

- DO** Leave solid pesticides in the container and make sure the lid is firmly closed before putting in the dustbin.
Empty liquid pesticides into the outside sink drain, the WC or on to soil and place the empty container in the dustbin (if you are not on main drainage emptying on to soil is preferable).
Consult your local authority if you have *large* quantities of pesticide to get rid of.

MISCELLANEOUS WASTES

General Household Cleaners, Do-it-Yourself Preparations, Paints, etc.

- DON'T** Empty paint, paint strippers, creosote, etc., on to soil or into the drainage system.
- DO** Flush general household cleaners (liquid) and similar liquid preparations down the WC or empty down the outside sink drain and place container in the dustbin.
Leave solid or semi-solid wastes in the container securely closed and put in the dustbin.
Dispose of paint and other similar preparations as a solid or semi-solid waste.

Aerosols

- DO** Place aerosol containers in the dustbin.

Hearing Aid and Photographic Batteries

- DO** Make use of recovery schemes when disposing of hearing-aid batteries; otherwise these and photographic batteries should be put in the dustbin.

Fluorescent Tubes

- DO** Place used fluorescent tubes in the container in which the replacement tube was received and place alongside the dustbin for collection.



SPECIAL ADVICE TO MOTORISTS

SUMP OIL

DON'T Pour used oil down the surface water drain or into the sewer;
DON'T Put it into the dustbin or on to soil.

DO Put it into a container and take it to your Civic Amenity

Site at

or to..... garage.

BULKY HOUSEHOLD DISCARDS (Old furniture, garden refuse, etc.)

Civic Amenity Sites are provided for your benefit so that you can dispose of your bulky wastes quickly.

Your nearest site(s) is/are at.....

Times of opening are.....

MAKE SURE YOU KNOW THE SITE IS OPEN BEFORE YOU GO

SPECIAL COLLECTION SERVICE

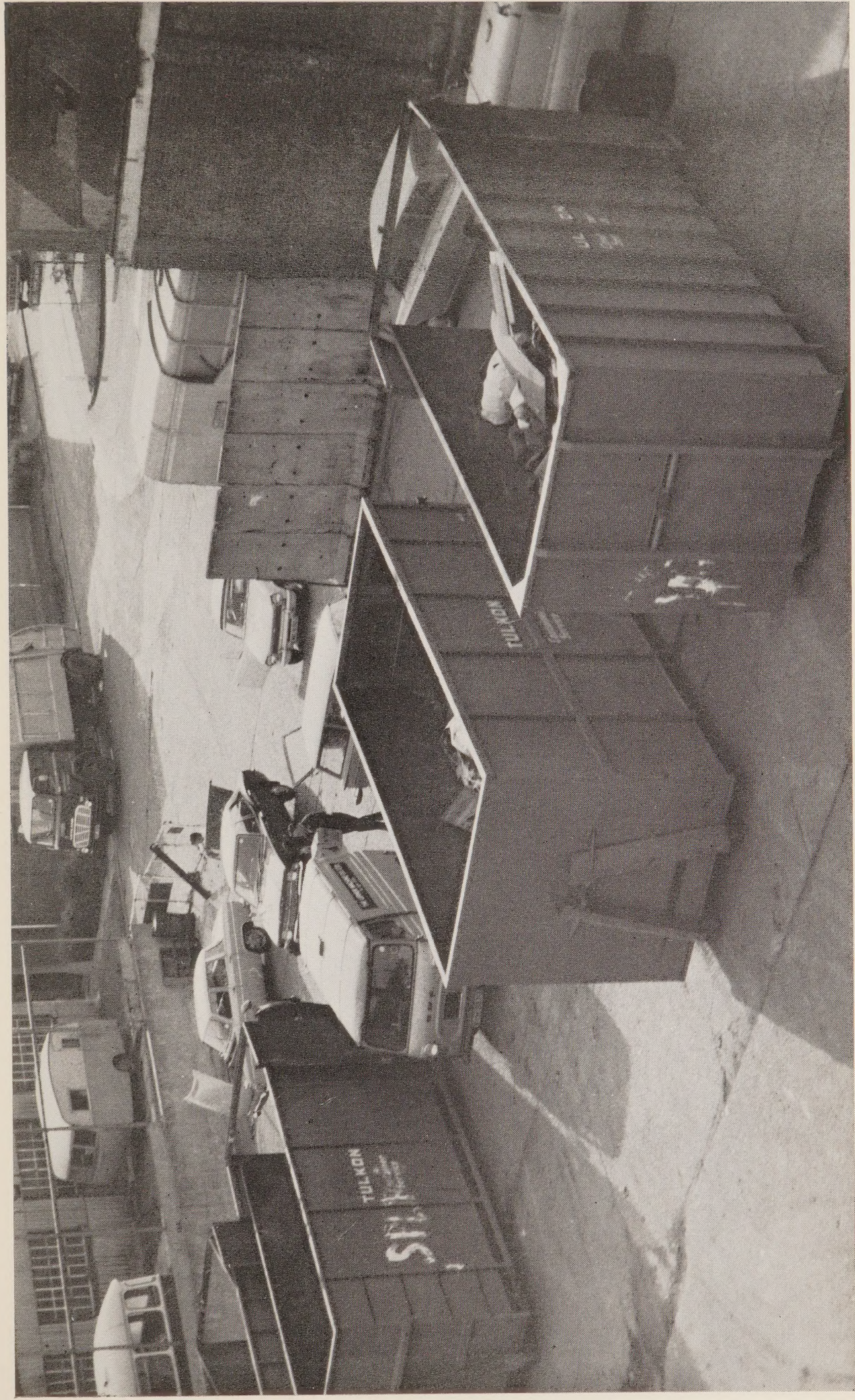
This service for the disposal of bulky wastes is also provided for the benefit of residents particularly those who are elderly or without transport:

Write or telephone.....

at..... Tel. No.....

giving the items to be collected and where they will be left.

They should be easily accessible for collection.



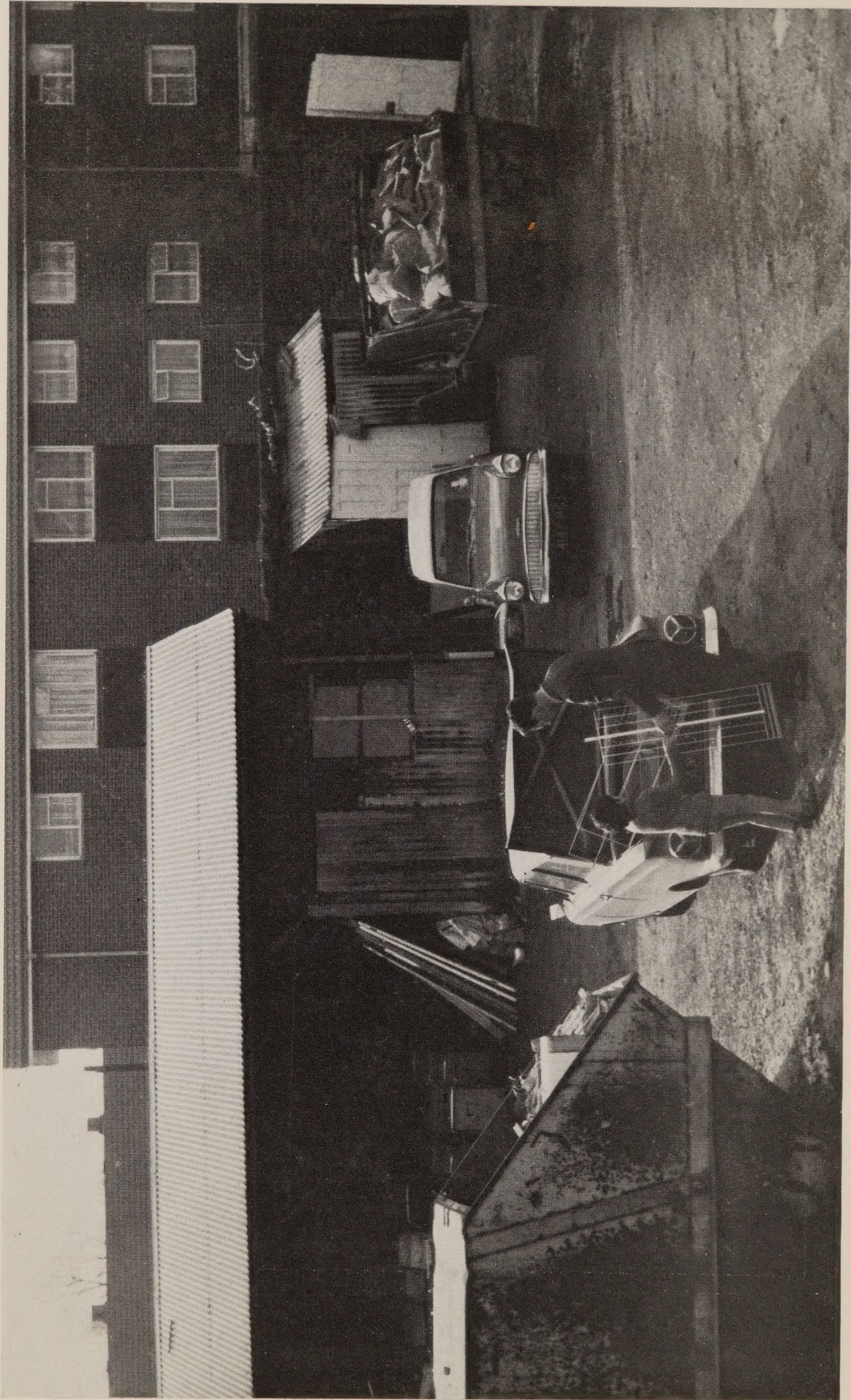


Plate 2.

THE ROYAL SOCIETY

FOR THE PROMOTION

OF HEALTH

~~90X BUCKINGHAM PALACE ROAD, LONDON, S.W.1~~

Borrowers must comply with the following by-laws governing the Library, made by the Council of the Society.

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Publications may not be taken or sent out of the United Kingdom.

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The library may be used for reference by members during the office hours of the Society.

Publications borrowed through the post must be acknowledged on the form provided, immediately upon receipt, and returned when due to the Librarian at the above address.

December, 1970.

HER MAJESTY'S STATIONERY OFFICE

Government Bookshops

49 High Holborn, London WC1V 6HB

13a Castle Street, Edinburgh EH2 3AR

41 The Hayes, Cardiff CF1 1JW

Brazennose Street, Manchester M60 8AS

Southey House, Wine Street, Bristol BS1 2BQ

258 Broad Street, Birmingham B1 2HE

80 Chichester Street, Belfast BT1 4JY

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through booksellers*